

3. Mindel A, Sutherland S. Genital herpes: the disease and its treatment including intravenous acyclovir. *J Antimicrob Chemother* 1983;12 suppl:51-9.
4. Corey L, Adams HG, Brown ZA, Holmes KK. Genital herpes simplex virus infections: clinical manifestations course and complications. *Ann Int Med* 1983;98:958-72.

To assess the feasibility of simple cytological diagnosis of occult anorectal HPV infection, we studied 102 homosexual men, aged 20 to 85 (mean age 32, median age 28). Anal smears were taken under proctoscopic vision from the level of the dentate line, processed in the same manner as routine Papanicolaou smears from women, and were all reviewed by me. Cytodiagnosis of HPV infection in smears from men presents morphological differences from those from women (Medley G and Drake M, unpublished observation). The finding of a transformation zone (squamocolumnar junction), however, with the capacity for metaplastic change, suggests, and can be shown to have, a possible vulnerability to development of dysplastic or precancerous change akin to the cervical transformation zone.

The results of the study are given in the table. Of 102 patients, 45 (44%) had features of HPV infection. Many had

	Patients (n = 102)	Smears (n = 111)
HPV infection without atypia	18	20
HPV infection with minor warty atypia	16	19
HPV infection with mild or moderate dysplasia (CIN I or 2*)	11	14
Total HPV infection	45	53
Non-specific inflammatory changes	16	16
No features of HPV infection	41	42

*Cervical intraepithelial neoplasia I or II

TO THE EDITOR, *British Journal of Venereal Diseases*

Anal smear test to diagnose occult anorectal infection with human papillomavirus in men

Sir,
Infection of the female genital tract with human papillomavirus (HPV) has assumed increasing importance since the cytological recognition of an occult form (non-condylomatous) indicated that its true prevalence is much higher than previously suspected.^{1,2} Indeed its role as a possible aetiological agent (or co-factor) in the development of cervical, vulval, and vaginal squamous cell carcinoma has been postulated.³ Recent identification of deoxyribonucleic acid (DNA) sequences of herpes simplex virus (HSV) subtypes in tumours⁴ (Zur Hausen H, personal communication) and of humoral markers in serum⁵ of patients with cervical cancer have lent credence to the hypothesis. The biology of tumour development has not been ascertained, although association with recognised oncogenic "permissive" factors of immune deficiency in kidney transplant recipients has been described.⁶

Recent demonstration of the acquired immune deficiency syndrome (AIDS) and lesser immunosuppression in homosexual men, and the associated instances of viral opportunism in this group,⁷ the high incidence of HSV,⁸ and the knowledge that condylomata are common, have led us to initiate a study to determine the incidence of non-condylomatous HPV infection of the anal canal by cytological means. Sporadic cases of anorectal cancer in homosexual men, occurring in a younger age group than usual, have been described, and the worldwide increasing incidence and mortality of invasive squamous cell cancer in young women (under 40 years)^{9,10} (often with an explosive course) would lead us to expect a possible similar increase in this group of men, 30-40% of whom may have some form of immune deficiency.⁷

previously had surgical or medical treatment for external anal condylomata, and a few still had them (two of the men with features of HPV infection and three of those without. This study will form the nucleus of a much larger prospective investigation and all patients will have documentation of current immunological status by customary protocol for such investigations, and be assessed both immunologically and cytologically at six monthly intervals. I thus hope to monitor the behaviour of this infection in a potentially immunocompromised group, and learn more of the biology of viral oncogenesis, if in fact this is a true hazard of this disease.

I am deeply indebted to Dr Rex Melville who took the smears, without whose skill

and care the study would have been impossible.

Yours faithfully,
Gabriele Medley

Department of Anatomical Pathology,
Prince Henry's Hospital and Victorian
Cytology (Gynaecological) Service,
Melbourne, Australia

References

1. Meisels A, Fortin R. Condylomatous lesions of the cervix and vagina. *Acta Cytol* 1976;20:505-9.
2. Lavery CR, Russell P, Hill E, Booth N. The significance of non-condylomatous wart virus infection of the cervical transformation zone. *Acta Cytol* 1978;22:195-201.
3. Zur Hausen H. Condylomata acuminata and human genital cancer. *Cancer Research* 1976;36:794.
4. Kurman J, Bennett-Jenson A, Lancaster W. Papilloma virus infection of the cervix II. *Am J Surg Pathol* 1983;7:39-52.
5. Baird PJ. Serological evidence for the association of papilloma virus and cervical neoplasia. *Lancet* 1983;ii:17.
6. Schneider V, Kay S, Lee HM. Immunosuppression as a high risk factor in the development of condyloma acuminatum and squamous neoplasia of the cervix. *Acta Cytol* 1983;27:220-4.
7. Pinching AJ, Jeffries DJ, Donaghy M. Studies of cellular immunity in male homosexuals in London. *Lancet* 1983;ii:126.
8. Goodell SE, Quinn TC, Mketichian E, et al. Herpes simplex virus proctitis in homosexual men. *N Engl J Med* 1983;308:868-71.
9. Armstrong B, Holman D. Increasing mortality from cancer of the cervix in young Australian women. *Med J Aust* 1981;1:460-2.
10. Canadian Task Force. Report on cervical cancer screening programs. *Can Med Assoc J* 1982;127:581.
11. Medley G, Drake M. Cytological diagnosis of anorectal HPV infection. (To be published).

TO THE EDITOR, *British Journal of Venereal Diseases*

Buschke-Loewenstein tumour and laser treatment

Sir,
We read with great interest the article of Harvey, Glen, and Watson entitled "Buschke-Loewenstein tumour of the penis" which was recently published in the *British Journal of Venereal Diseases*.¹ The authors described a 30 year old married man with giant condylomata acuminata of the penis which were treated by subtotal amputation of the penis. In the article the authors stated: "Laser treatment would have required an experienced operator; although it has been used in simple condylomata acuminata, it would not have been easy to assess the depth of the tumour."